

REMARKS

In response to the final Official Action of November 26, 2004 and the Advisory Action of February 15, 2005, claims 1, 17 and 23 have been amended in a manner which is believed to overcome the rejection of the claims under 35 U.S.C. §112 and in view of cited prior art and under 35 U.S.C. §102. A typographical error in the specification at page 4 has also been corrected. No new matter has been added.

Support for the amendment to claim 1 can be found throughout the application as originally filed, including problems associated with handoff as recited in the Background section at page 1, line 18 through page 2, line 31, the solution thereto as recited in the Summary section at page 2, lines 33-34 and in the Detailed Description section at page 11, lines 9-17 and page 12, lines 13-24, with referenced Figures 2 and 3. The terms base station and mobile station are found throughout the specification and drawings (see page 6, line 28 through page 8, line 5). Regarding claims 17 and 23, support for the amendment is found at page 3, line 15 through page 4, line 21 and page 7, line 1 through page 9, line 22.

Before addressing the merits concerning the claims, applicant notes that claim 24 has been withdrawn from consideration as being directed to a non-elected invention as set forth in paragraphs 1 and 2 of the Official Action.

Regarding paragraph 3 of the Official Action, the Examiner objected to the drawings as not showing every feature of the invention specified in the claims; and in particular the “another first station” as recited in claim 1. Claim 1 has been amended to delete the objected phraseology. Specifically, claim 1 has been amended to recite that what was formerly identified as “first stations” are now identified as “base stations” as shown in Figures 1 and 2 and as fully described throughout the entire application. Similarly, the second station is now identified as a mobile station, again, as shown in Figures 1 and 2 and described throughout the specification. With this amendment of claim 1, the drawings do not require any amendment and therefore no proposed drawing correction and corresponding corrected drawings are submitted herewith.

Referring now to paragraphs 5 and 6 of the Official Action, it is respectfully submitted that claims 1-16 are not indefinite under 35 U.S.C. §112, second paragraph, in view of the fact that the

objected phrase in claim 1, "another first station," has been amended. As clearly seen in Figure 2, there are in fact two base stations shown. These base stations correspond to the one base station (4; 10) and the another base station (4; 12) set forth in claim 1 (see corresponding description at page 6, line 20 through page 11, line 29). Claim 1 is therefore believed to particularly point out and distinctly claim that which applicant regards as its invention.

In view of claim 1 being amended in a manner which is believed to be definite, dependent claims 2-16 are also believed to be definite.

Referring now to paragraphs 7 and 8 of the Official Action, it is respectfully submitted that claims 1-6 and 9-14 are not anticipated in view of US patent 6,073,021, Kumar et al (hereinafter Kumar), where these claims are rejected based on the reasons set forth at paragraph 5 of the Official Action dated June 6, 2004. At paragraph 5 of the Official Action dated June 6, 2004, it is stated that Kumar discloses a method of transmitting signals from a plurality of first stations to the same second station and that Kumar also discloses transmitting first signals comprising a first communication and first associated information from one of the plurality of first stations to the second station, transmitting second signals comprising the first communication, a second communication and second associated information, wherein the second associated information differs at least partially from the first associated information, from another of the plurality of first stations to the second station, and receiving at the second station the first and second signals wherein the second station processes the first and second signals in accordance with the first and second associated information. Claim 1 has been amended to particularly point out and claim that it is directed to a method of transmitting signals from a plurality of base stations to the same mobile station in handoff while in Kumar the same information is communicated from each base station to the mobile station with the only difference being phase offsets of the spreading sequence. By adding the "in handoff" limitation, applicant has presented claim amendment that corresponds to the feature which the Examiner stated was argued but not presented in claim 1 (see page 18, lines 5-11 of the final Office Action).

Specifically, in Kumar at column 3, lines 52-58 it is stated:

"For example, in a CDMA wireless communication system, the candidate base station would transmit the handoff command message using the modulation scheme, pair of

pseudo-noise sequences, pseudo-noise sequence offsets, and Walsh function associated [sic] with the forward traffic channel being used by the primary base station for communicating with the mobile-telephone.”

The only difference concerning the candidate base station is set forth at lines 58-64 wherein it states:

“In this embodiment of the present invention, the candidate base station also transmits a pilot signal (with the handoff direction message) using the pilot channel of the primary base station to enable the mobile-telephone to coherently demodulate the handoff direction message (transmitted from the candidate base station).”

There is absolutely no disclosure in Kumar of the candidate base station transmitting second signals that comprise the first communication of the first base station as well as a second communication and second associated information wherein the second associated information differs at least partially from the first associated information transmitted with the first communication of the first base station.

Furthermore, the problem addressed in Kumar is different than that of the present invention. In Kumar, the purpose of the candidate base station being used for soft handoffs is to counter some of the major causes for failed soft handoffs; such as new obstacles between the mobile-telephone and the active set base stations and increased interference due to signals transmitted from the candidate base station (see column 3, line 64 through column 4, line 2).

In the present invention, the problem being addressed is where two base stations with which a mobile station is in communication are under the control of different radio network controllers and the problem associated with handoff, particularly for a data connection. In order to overcome the problem of a mobile station inadvertently assuming that there is no data information when the mobile station has only been advised that there is data information from one base station and not the other, which can occur when different radio network controllers are utilized, the present invention causes second associated information being transmitted as part of the second signals from the another base station wherein the second associated information differs at least partially from the first associated information that is associated with the first communication of the first base station and which therefore provides the mobile station receiving the first and second signals and hence the

first and second associated information, to process this information in a manner which avoids the problem of potentially having an improper handoff when speech and data information are present or not present as the case may be. This aspect of the present invention is recited in amended claim 1 in general terms and therefore is believed to clearly be distinguished from the handoff procedure recited in Kumar.

For all of the foregoing reasons, it is respectfully submitted that claim 1 as amended is definite and defines the invention in a manner which is distinguished from the disclosure in Kumar. In fact, claim 1 would not read on the disclosure in Kumar contrary to the position asserted by the Examiner at page 16, paragraph 21 through page 19, line 11. It is therefore respectfully submitted that claim 1 is neither anticipated nor suggested by Kumar and therefore dependent claims 2-16 are also believed to be neither disclosed nor suggested by Kumar.

Referring now to paragraph 9 of the Official Action, it is respectfully submitted that claim 17-19 and 23, as amended, are not anticipated by US patent 6,144,861, Sundelin et al (hereinafter Sundelin), where these claims are rejected based upon reasons set forth at paragraph 6 of the Official Action of June 6, 2004. More particularly, claim 17 has been amended to particularly point out and claim that at least one of the first stations is connected to one control element and at least one of the first stations is connected to a different control element, wherein in a first mode when a second station is in communication with a plurality of first stations controlled by the same control element that this communication is on a dedicated channel and that the first stations transmit identical control information to the second station. It is also pointed out that in a second mode when a second station is in communication with a plurality of first stations which are controlled by a plurality of different control elements, that the communication is on a shared channel and that the control information transmitted by the first stations to the second station is differently coded. A similar amendment has been made to claim 23. Support for this amendment can be found at page 5, lines 11-23, page 7, first full paragraph, as well as page 9, line 5 through page 11, line 8.

For the reasons set forth below, it is respectfully submitted that Sundelin does not disclose or suggest amended claims 17 and 23.

More particularly, regarding Sundelin, the Examiner at paragraph 6 of the Official Action of June 6, 2004 references Figure 1 and column 6, lines 26-51 in support of the argument that

Sundelin teaches previously submitted claim 17. It should be noted however that the recited passage at column 6, lines 25-51 is with reference to Figure 3 (not Figure 1 as stated in the Office Action) and, in particular, to a situation in which base stations BS1 and BS2 are connected to the same radio network controller (RNC). Specifically, at column 6, lines 18-25, it is stated with regard to base stations BS1 and BS2:

“Although multiple base stations may be involved in a diversity handover, and although more than one RNC may be involved in a diversity handover, such as illustrated in FIG. 1 with respect to communications between base stations 20 and 22 and mobile station 30, the following description is simplified for purposes of illustration only to the scenario involving only two base stations BS1 and BS2 connected to the same RNC are involved in the diversity handover (emphasis added).”

Thus, the recited passage submitted by the Examiner at paragraph 6 of the Official Action in support of a plurality of first stations which are controlled by different control elements such that control information transmitted by said first stations to said second station is different, does not in fact support this configuration.

In addition, claim 17 has been amended to specify that wherein at least one of said first stations is connected to one control element and at least one of the first stations is connected to a different control element, wherein in a first mode when a second station is in communication on a dedicated channel with a plurality of first stations controlled by the same control element, the first stations transmit identical information. It further specifies that in the second mode when a second station is in communication on a shared channel with a plurality of first stations which are controlled by a plurality of different control elements, the control information transmitted by the first stations to the second station is differently coded. The concept of differently coding the control information transmitted by first stations to a second station when the second station is in communication with a plurality of first stations which are controlled by a plurality of different control elements as compared to the control information transmitted to a second station from a plurality of first stations where those first stations are controlled by the same control element, is neither disclosed nor suggested by Sundelin. Furthermore, Figure 1 of Sundelin and the accompanying description at column 5, line 15 through column 6, line 14 does not anticipate or

suggest that control information is coded differently between first stations and a second station where the first stations use the same control element and first stations and a second station where the first stations use different control elements.

Consequently, amended claim 17 and the dependent claims thereto are believed to be neither anticipated nor suggested by Sundelin.

Claim 23 has been amended in a manner similar to that of claim 17 and, for the same reasons as recited above, claim 23 is also believed to be distinguished over Sundelin.

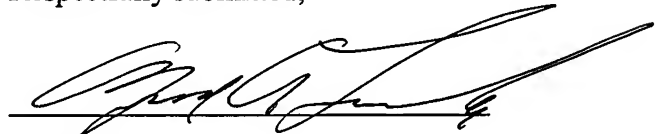
It is respectfully submitted that the amendments to claims 1, 17 and 23 comply with the statement made in the final Office Action (see page 18, lines 5-11) and are not believed to require any new examination. As such, these claim amendments are believed to be in compliance with 37 C.F.R. §1.116 and entry of this amendment is earnestly solicited.

For purposes of completeness, it is noted that paragraphs 15-20 in the final Official Action are directed to ministerial rules concerning communications with the United States Patent and Trademark Office and are not directed to the merits of the present application. Therefore, no response to these paragraphs are presented herewith.

Applicant's attorney would be pleased to discuss by telephone interview the prosecution of the present application with the Examiner if the Examiner believes there are any unresolved issues.

In view of the foregoing, it is respectfully submitted that the present application as amended is in condition for allowance and such action is earnestly solicited.

Respectfully submitted,



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